

WHAT IS CLAIMED IS:

1 1. A method of identifying potential risk, the risk due to potential
2 disruptions in material supply to a manufacturing facility, the method comprising:
3 identifying a component for an assembled product, the component being
4 purchased from a supplier, wherein identifying the component includes
5 identifying the supplier and a manufacturer's part number of the
6 component; and
7 storing an identity of the component.

1 2. A method of identifying potential risk, the risk due to potential
2 disruptions in material supply to a manufacturing facility, the method comprising:
3 determining a set of components for an assembled product;
4 storing the set of components;
5 determining a set of sub-components for the set of components;
6 storing the set of sub-components; and
7 combining the set of components and the set of sub-components.

1 3. The method as recited in claim 2, further comprising:
2 storing a country of origin of the set of components.

1 4. The method as recited in claim 2, further comprising:
2 storing an indicia of the geopolitical risk associated with the country of origin
3 of the set of components.

1 5. The method as recited in claim 2, further comprising:
2 storing an identity of a supplier of the set of components.

1 6. The method as recited in claim 2, further comprising:
2 storing an identity of an assembler of the set of components.

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1 15. The method as recited in claim 2, further comprising:
2 forecasting future requirements of a component.

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adding the material cost, the cost of labor to assemble the component, the cost of labor to test the component, the overhead cost, the freight cost, the warranty cost and the miscellaneous cost; and benchmarking the cost of the component.

21. A method for determining a best bill of materials, comprising:
determining a benchmark cost for the bill of materials supplied by a supplier;
determining a class of suppliers, the class of suppliers supplying equivalent bills of materials to a manufacturer; and
determining a supplier within a class of suppliers, the supplier providing a lowest cost bill of materials to the manufacturer.

22. A method for manufacturing a computer system, comprising:
determining a best bill of materials; and
assembling the computer system with a component, the component determined by the best bill of materials.

23. A method of designing a computer system, comprising:
determining a benchmark cost of a component; and
determining a best costed bill of materials for a computer system.

24. A method of assembling a computer system, comprising:
assembling a set of components, wherein a component included in the set of components is selected by determining a best costed bill of materials, wherein the best costed bill of materials is determined by a benchmark cost of the component selected.

25. A system for managing purchasing information, comprising:
a computer system, the computer system including a processor, a memory and a database, the database comprising:
an identifier of a component; and

5 a part number of the component, the part number assigned to the
6 component by a manufacturer.

1 26. The system as recited in claim 25, the database further comprising:
2 a country of origin of the component.

1 27. The system as recited in claim 26, the database also including an
2 indicia of geopolitical risk of the country of origin.

1 28. The system as recited in claim 25, the database further comprising:
2 the identity of a supplier of the component, the identity of the supplier
3 including a location of the supplier.

1 29. The system as recited in claim 25, the database further comprising:
2 a name of a foundry of the component.

1 30. The system as recited in claim 25, the database further comprising:
2 a vendor of the component.

1 31. The system as recited in claim 25, the database further comprising:
2 an end-of-life date for the component.

1 32. The system as recited in claim 25, further comprising:
2 a set of sub-components.

1 33. A system for managing purchasing information, the system on a
2 computer system, the computer system including a processor and a memory, the
3 system comprising:
4 a non-volatile computer readable memory, the non-volatile computer readable
5 memory including:
6 instructions to determine a benchmark cost of material.

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1 34. The system as recited in claim 33, the non-volatile computer readable
2 memory also including:
3 instructions to determine a best bill of materials.

1 35. A method of forecasting materials requirements, comprising:
2 storing on a non-volatile computer readable media a set of components for an
3 assembled product;
4 storing on a non-volatile computer readable media set of sub-components for
5 the set of components;
6 combining the set of components and the set of sub-components;
7 storing on a non-volatile computer readable media the combined set of
8 components and sub-components;
9 determining from suppliers the quantity of components available during a
10 specified time period;
11 developing a production plan, the production plan estimating the quantity of
12 items by be manufactured within a specified time period; and
13 comparing the quantity of material projected by the production plan to the
14 quantity of components available from suppliers.

1 36. A method of organizing a bill of materials, comprising:
2 determining an attribute of component;
3 determining a sub-attribute grouping of the component;
4 determining a sub-attribute of the attribute, the sub-attribute associated with
5 the group; and
6 storing in a database the attribute and sub-attribute of the component.

1 37. A method of comparing components, comprising:
2 determining an attributes of a first component;
3 storing in a database the attribute of the first component;
4 determining an attributes of a second component;
5 storing in a database the attribute of the second component;

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6 comparing electronically the attribute of first component to the attribute of the
7 second component; and
8 identifying the second component not equivalent to the first component if the
9 attributes do not match.

1 38. The method of identifying a substitute component, comprising:
2 determining an attributes of a first component;
3 storing in a database the attribute of the first component;
4 determining an attributes of a second component;
5 storing in a database the attribute of the second component;
6 comparing electronically the attribute of first component to the attribute of the
7 second component; and
8 identifying the second component a substitute for the first component if the
9 attributes match.

1 39. A computer program product encoded on computer readable media, the
2 computer program product comprising:
3 instructions, executable on a computer system, configured to store a bill of
4 materials, the bill of materials comprising:
5 a first component, the first component having an attribute;
6 and
7 a second component, the second component having an attribute.

1 40. The system as recited in claim 39, further comprising:
2 instructions configured to compare the attribute of the first component with
3 the attribute of the second component.

1 41. The system as recited in claim 39, wherein the attribute of the first
2 component is an end-of-life date of the first component.

1 42. The system as recited in claim 39, wherein the attribute of the first
2 component is a part number, the part number assigned by a manufacturer.

1 43. The system as recited in claim 39, wherein the attribute of the first
2 component is a country of origin of the first component.

1 44. The system as recited in claim 39, wherein the attribute of the first
2 component is an indicia of risk of the county of origin of the first component.

1 45. The system as recited in claim 39, wherein the attribute of the first
2 component is a location of a foundry of the first component.

1 46. The system as recited in claim 39, wherein the attribute of the first
2 component is a vendor of the first component.

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